

Munds Park RV Campground Wastewater Treatment System
Aquifer Protection Permit No. P-105248
Place ID 6587, LTF No. 77602
Significant Amendment

I. Introduction:

The Arizona Department of Environmental Quality (ADEQ) proposes to issue an Aquifer Protection Permit (APP) for the subject facility that covers the life of the facility, including operational, closure, and post-closure periods unless suspended or revoked pursuant to Arizona Administrative Code (A.A.C.) R18-9-A213. The requirements contained in this permit will allow the permittee to comply with the two key requirements of the Aquifer Protection Program: 1) meet Aquifer Water Quality Standards (AWQS) at the Point of Compliance (POC); and 2) demonstrate Best Available Demonstrated Control Technology (BADCT). BADCT's purpose is to employ engineering controls, processes, operating methods or other alternatives, including site-specific characteristics (i.e., the local subsurface geology), to reduce discharge of pollutants to the greatest degree achievable before they reach the aquifer or to prevent pollutants from reaching the aquifer.

II. Permittee & Facility Location:

The facility is located at 17550 Munds Park Road, in Munds Park, in Coconino County, Arizona.

III. Facility Description:

The permittee is authorized to operate Munds Park RV Campground Wastewater Treatment System (WWTS) with a maximum flow of 44,600 gallons per day (gpd) from four phases. The WWTS serves RV sites from Phase I, IA, II and III. Once the Phase III flows are diverted to Pinewood Sanitary District Wastewater Treatment Plant (WWTP), the flow for the Munds Park WWTS will be reduced to 34,000 gpd from Phase I, IA and II.

Phase I System: Phase I system is designed to treat 17,156 gallons per day (gpd) of flow from 142 RV spaces, a general store, a commercial swimming pool, and two apartments. Phase I consists of 14 septic tanks with disposal through leach lines.

Phase IA System: Phase IA consists of the individual wastewater treatment systems for the Shopping Center and Recreation Buildings. The treatment system for the Shopping Center consists of a grease trap interceptor, two 5,500 gallon septic tanks, one recirculation tank, an Advantex AX-100 Textile filter, chlorinator/dechlorinator and the pump tank. The flow is designed to be 2100 gpd for the Shopping Center. The effluent is discharged to a drip irrigation system buried one foot in depth. The Recreation Buildings System is designed for flow of 700 gpd and consists of two 1,700 gallon septic tanks, a grease trap interceptor, two Advantex AX-20 filters, one 4,000 gallon recirculation tank/surge tank, Norweco XT-discharged to infiltrator trenches. The total flow for Phase IA is approximately 2,800 gpd.

Phase II System: Phase II System is designed to treat flow of 14,037 gpd. Phase II System serves 122 RV spaces and a laundry facility with 6 washing machines. Phase II system consists of 14 septic tanks, 12 distribution field pumps, and 10 disposal beds. The disposal beds are constructed of a layer of silt, filter fabric, coarse gravel and sawdust. The facility is required to monitor the Best Available Demonstrated Control Technology (BADCT) Alert Level wells MW-4, MW-5 and

MW-6 in lieu of the L-shaped effluent sampling ports for Phase II System per Table 9 in the permit. This monitoring will be conducted only during the normal months of operation of the RV Park, which is from 1st April to 31st October every year.

Phase III System: Phase III system is designed to treat 10,600 gpd of flow. Phase III consists of 106 RV spaces that includes 6 septic tanks (a series of 5 larger septic tanks and 1 smaller septic tanks), 18 pumping stations, and 2 larger disposal fields. The disposal beds are constructed of a layer of silt, filter fabric, coarse gravel, and sawdust.

Phase III will be connected to the Pinewood Sanitary District WWTP (PWSD) and the wastewater flow from Phase III will be diverted for treatment to PWSD WWTP. Until the Phase III flow is diverted, the facility shall continue the facility inspection for Phase III system per Table 12. The facility shall notified Groundwater Protection Value Stream upon connecting to the PWSD WWTP per Compliance Schedule Item #1 in the permit. The facility shall conduct the closure of Phase III per approved closure plan per Compliance Schedule Item #3 in the permit. In case the facility decides not to connect to PWSD WWTP, the facility shall submit an amendment application to add the monitoring requirements for Phase III per Compliance Schedule Item #2.

IV. Amendment Description:

ADEQ reviewed and approved the following changes to the permit:

- Allowance of monitoring of BADCT Alert Level wells MW-4, MW-5 and MW-6 in lieu of the L-shaped effluent sampling ports for discharge monitoring in the permit for the Phase II system.
 - Due to the constraints of using the L-shaped effluent sampling ports, the facility proposed to collect Phase II discharge monitoring samples from downgradient BADCT Alert Level Wells (Wells) MW-4, MW-5, and MW-6.
- Updated the closure and post closure cost and financial assurance mechanism for the facility.
- Allowance to conduct discharge and groundwater monitoring only during the operational season of the RV Park, which is from 1st April to 31st October every year.
- Addition of the groundwater monitoring requirements in the permit for monitoring well POC-1.
 - The facility has never been able to obtain effluent samples from L-shaped ports. The facility proposed to collect the samples from groundwater monitoring well in addition to the sampling of downgradient BADCT Alert Level Wells (Wells) MW-4, MW-5, and MW-6 to demonstrate that the groundwater is not being impacted.
- Addition of the compliance schedule item to reduce the monitoring requirements for Phase II after two operational seasons of monitoring.
- Approval of closure plan for Phase III system. Once Phase III flow will be diverted to the Pinewood Sanitary District WWTP, Phase III system will be closed per the closure plan submitted under this amendment.

The permit category for this amendment was determined to be a “Significant Amendment” as per A.A.C. R18-9-A211(B)(4) and (7).

V. Regulatory Status

- Munds Park Resort, Inc. received a Consent Order, Docket No. DW-03-13 dated January 17, 2013 and amended on September 29, 2016, for failure to obtain valid samples from the Phase II and III effluent sampling ports for discharge monitoring, operating Phase IA Treatment System without permit.
- This amendment is in response to a Consent Order compliance conditions.

VI. Best Available Demonstrated Control Technology (BADCT):

Phase II & III Wastewater Treatment System is designed to meet the treatment performance criteria for new facilities as specified in Arizona Administrative Code R18-9-B204. Phase I and IA has been operating under a Type 4.23 General APP.

VII. Compliance with Aquifer Water Quality Standards (AWQS):

The facility will be monitoring at BADCT Alert Level Wells MW-4, MW-5 and MW-6 in lieu of effluent sampling ports. The representative samples will be monitored monthly for *E. coli* and total nitrogen, quarterly for metals and annually for volatile and semi-volatile organic compounds.

To ensure that Aquifer Water Quality Standards will be met at the POC in the aquifer, representative samples of the groundwater will be collected from POC Well #1, and will be sampled monthly for *E. coli*, nitrate-nitrite as N, nitrate as N and nitrite as N.